Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P436914

Luminaire Tested: **TT-D6-830-U-RW-HSS**

Issue Date: 12/2/2020

Report Generated By 670347003

Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P436914
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2010-017-5)
Test Lab:	INNOVATION CENTER
Issue Date:	12/2/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	TT-D6-830-U-RW-HSS
Description:	TOPTIER LED PARKING GARAGE LUMINAIRE
	3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH HOUSE SIDE SHIELD
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	7044.1 lumens
Efficiency:	N/A
Efficacy:	67.0 lumens/watt
Luminous Opening:	Circular (Dia: 1.12' x H: 0')
IES Classification:	Type IV - Short
BUG Rating:	B2 - U2 - G3

Input Watts (W):	105.2
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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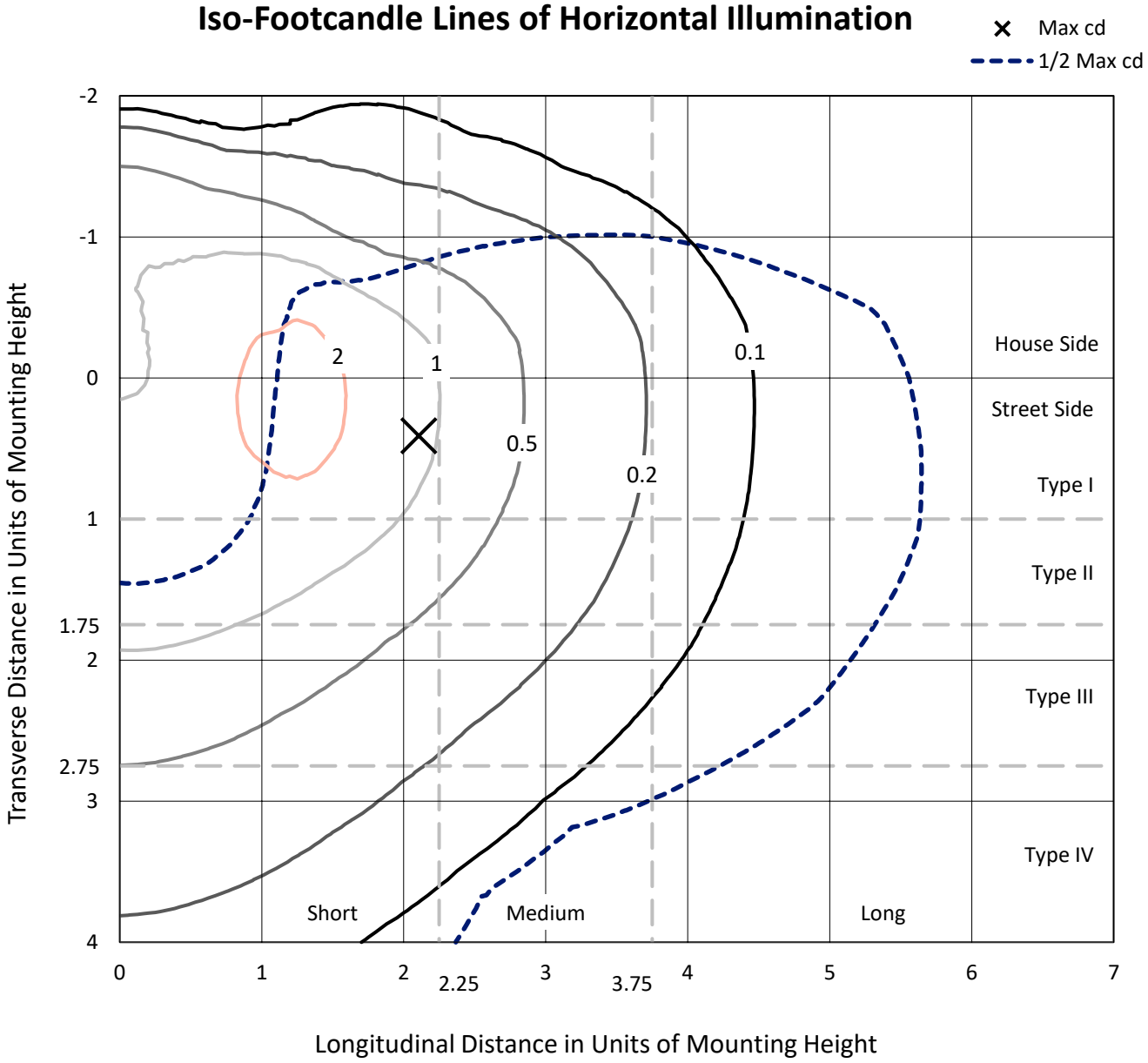
Iso-Footcandle Lines of Horizontal Illumination



Based on 15 foot mounting height. Maximum calculated value = 2.5 fc
Type IV - Short - N/A

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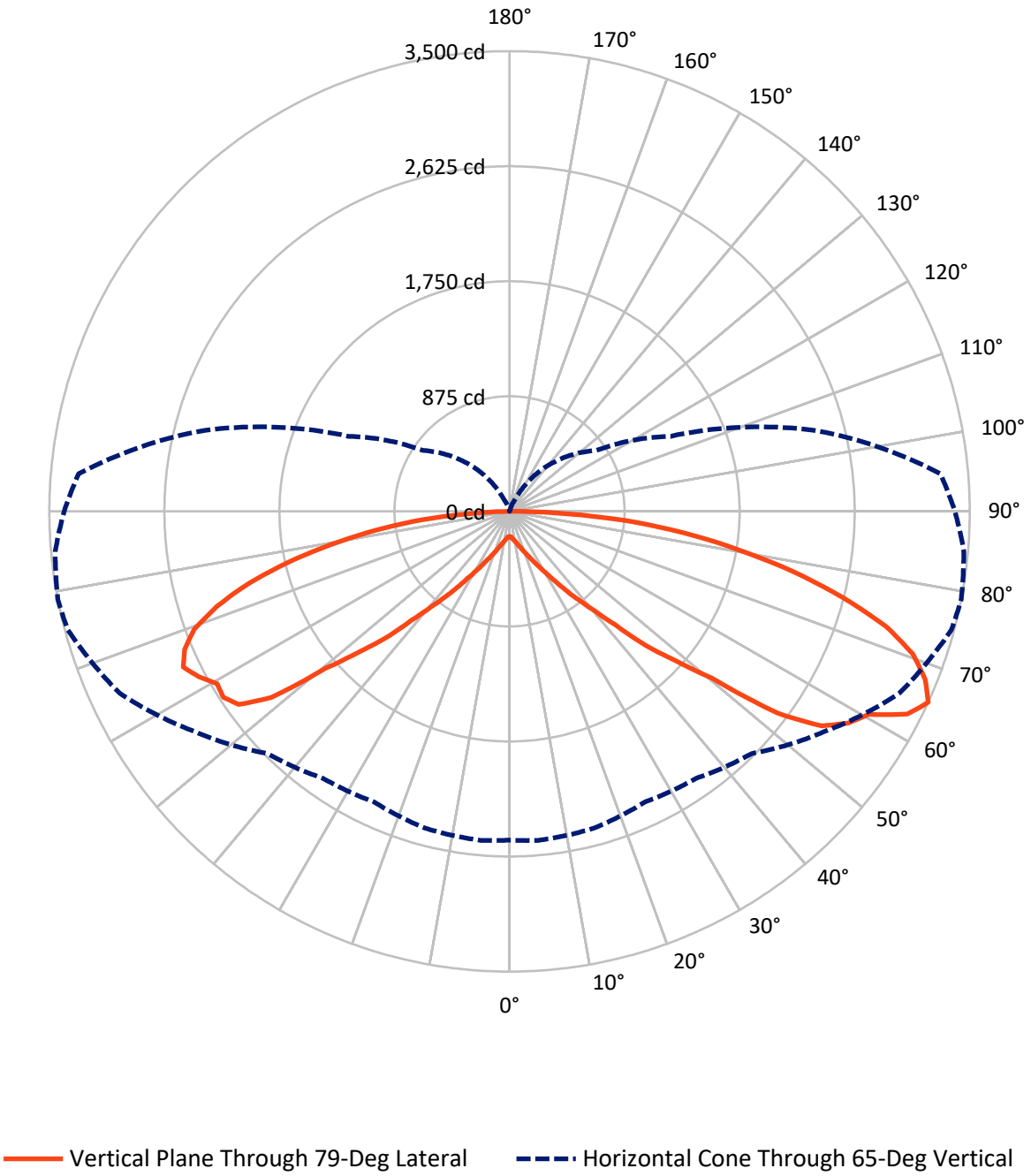
Luminous Intensity Polar Plot



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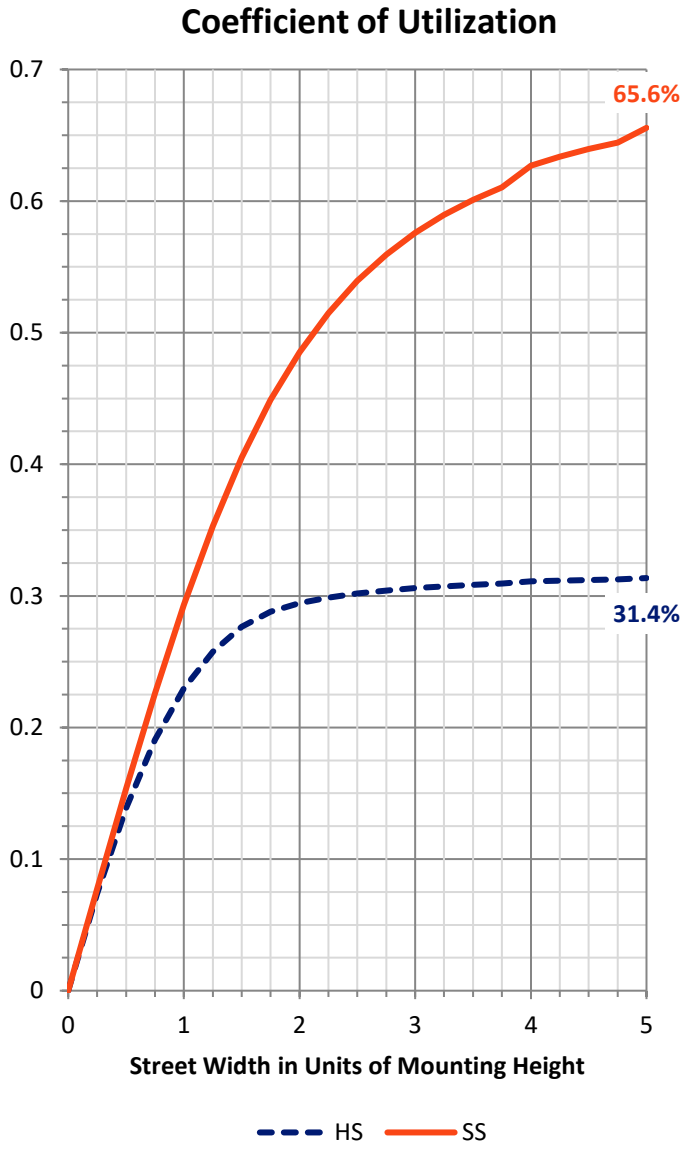
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2224.4	2.9	2227.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	4785.7	31.1	4816.8
	% Fixture	67.9	0.4	68.4
Total	Lumens	7010.1	34.0	7044.1
	% Fixture	99.5	0.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.1	0.3
10°-20°	75.9	1.1
20°-30°	175.0	2.5
30°-40°	374.9	5.3
40°-50°	803.1	11.4
50°-60°	1516.7	21.5
60°-70°	1884.9	26.8
70°-80°	1613.6	22.9
80°-90°	545.8	7.7
90°-100°	23.6	0.3
100°-110°	6.8	0.1
110°-120°	1.5	0.0
120°-130°	0.8	0.0
130°-140°	0.5	0.0
140°-150°	0.4	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	7010.1	99.5
0°-180°	7044.1	100.0



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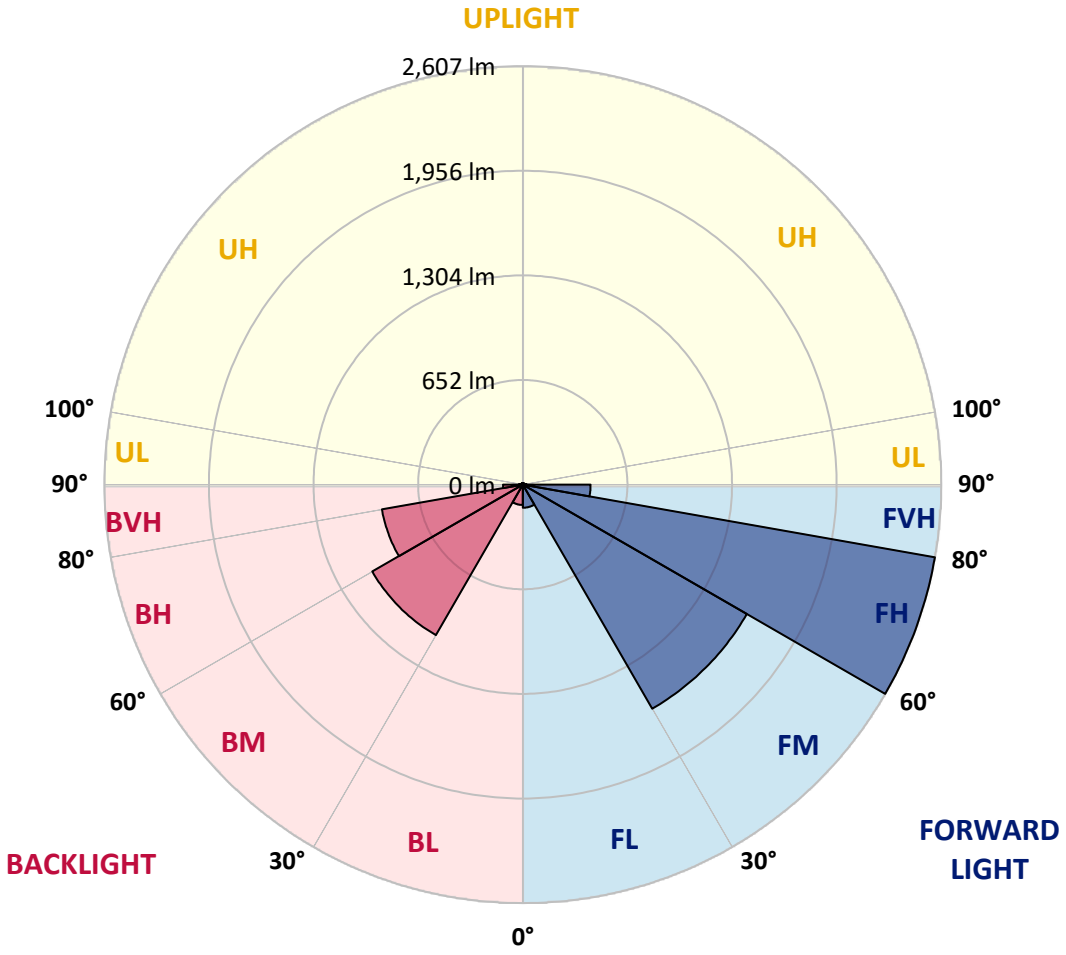
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	144.0	2.0			
FM	(30°-60°)	1612.0	22.9			
FH	(60°-80°)	2607.4	37.0			G2/5000
FVH	(80°-90°)	422.3	6.0			G3/500
BL	(0°-30°)	126.9	1.8	B1/500		
BM	(30°-60°)	1082.7	15.4	B2/2500		
BH	(60°-80°)	891.2	12.7	B2/1000		G2/1000
BVH	(80°-90°)	123.6	1.8			G2/225
UL	(90°-100°)	23.6	0.3		U2/50	
UH	(100°-180°)	10.4	0.1		U2/50	

BUG Rating: B2-U2-G3
Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	*191.3*	191.3
2.5°	201.9	201.9	201.9	200.1	200.1	200.1	198.3	196.6	194.8	*194.8*	194.8
5°	212.4	212.4	212.4	212.4	210.6	208.9	207.1	205.4	203.6	*203.6*	201.9
7.5°	226.4	224.7	226.4	224.7	224.7	222.9	221.2	219.4	215.9	*215.9*	214.1
10°	240.5	240.5	240.5	240.5	240.5	238.7	237.0	235.2	233.4	*231.7*	229.9
12.5°	258.0	258.0	258.0	256.3	258.0	256.3	254.5	254.5	252.8	*249.2*	249.2
15°	275.6	275.6	275.6	275.6	277.3	277.3	277.3	275.6	275.6	*273.8*	272.1
17.5°	296.6	294.9	296.6	296.6	298.4	300.1	301.9	303.7	303.7	*301.9*	301.9
20°	319.5	317.7	319.5	319.5	323.0	326.5	331.7	335.2	337.0	*333.5*	333.5
22.5°	344.0	342.3	345.8	345.8	351.0	356.3	365.1	368.6	373.9	*372.1*	372.1
25°	373.9	372.1	373.9	375.6	382.6	391.4	401.9	410.7	416.0	*416.0*	417.7
27.5°	407.2	407.2	409.0	410.7	417.7	431.8	447.6	463.4	475.7	*473.9*	475.7
30°	452.9	452.9	456.4	458.1	466.9	482.7	503.8	524.8	542.4	*542.4*	545.9
32.5°	503.8	502.0	507.3	509.0	517.8	538.9	568.7	602.0	624.9	*624.9*	628.4
35°	565.2	563.4	568.7	568.7	579.2	609.1	647.7	693.3	731.9	*733.7*	739.0
37.5°	642.4	638.9	638.9	644.2	656.5	695.1	747.7	810.9	851.3	*854.8*	863.6
40°	733.7	731.9	735.4	733.7	749.5	796.9	863.6	937.3	984.7	*993.5*	1004.0
42.5°	846.0	849.5	844.3	844.3	863.6	918.0	997.0	1083.0	1169.0	*1179.5*	1184.8
45°	982.9	990.0	982.9	981.2	998.7	1061.9	1170.7	1321.7	1421.7	*1456.8*	1467.4
47.5°	1147.9	1151.4	1142.7	1139.1	1158.5	1239.2	1379.6	1548.1	1665.7	*1692.0*	1720.1
50°	1332.2	1327.0	1319.9	1314.7	1351.5	1451.6	1614.8	1788.6	1990.4	*1993.9*	2004.5
52.5°	1521.8	1506.0	1507.7	1506.0	1556.9	1665.7	1883.4	2178.2	2485.4	*2548.6*	2555.6
55°	1711.4	1692.0	1690.3	1707.8	1779.8	1936.0	2209.8	2592.5	2841.7	*2880.3*	2875.1
57.5°	1900.9	1892.1	1888.6	1904.4	2009.7	2195.8	2504.7	2827.7	3040.1	*3036.6*	2999.7
60°	2097.5	2104.5	2092.2	2122.1	2230.9	2417.0	2641.6	2955.8	3152.4	*3136.6*	3099.7
62.5°	2299.4	2316.9	2304.6	2308.1	2378.3	2515.3	2736.4	3101.5	3373.6	*3396.4*	3354.3
65°	*2499.5*	*2511.7*	*2492.4*	*2438.0*	*2476.6*	*2604.8*	*2920.7*	*3271.8*	*3478.9*	*3499.9*	*3468.3*
67.5°	2668.0	2680.2	2613.5	2527.5	2532.8	2625.8	2903.2	3238.4	3422.7	*3408.7*	3357.8
70°	2811.9	2789.1	2680.2	2532.8	2471.4	2515.3	2776.8	3073.4	3261.2	*3254.2*	3194.5
72.5°	2859.3	2829.4	2645.1	2417.0	2295.8	2311.6	2566.2	2831.2	2983.9	*2996.2*	2924.2
75°	2783.8	2732.9	2480.1	2194.0	2037.8	2048.4	2266.0	2510.0	2632.9	*2618.8*	2562.6
77.5°	2511.7	2460.8	2187.0	1881.6	1728.9	1744.7	1916.7	2108.0	2209.8	*2204.6*	2166.0
80°	2085.2	2039.6	1799.1	1514.8	1376.1	1384.9	1516.5	1667.5	1746.5	*1764.0*	1742.9
82.5°	1541.1	1509.5	1339.2	1109.3	997.0	995.2	1095.3	1211.1	1288.3	*1325.2*	1311.2
85°	953.1	937.3	842.5	693.3	614.3	612.6	672.3	758.3	828.5	*877.6*	846.0
87.5°	379.1	373.9	345.8	279.1	244.0	231.7	217.6	272.1	277.3	*328.2*	326.5
90°	93.0	91.3	89.5	84.3	75.5	64.9	52.7	38.6	24.6	*19.3*	10.5
92.5°	82.5	82.5	80.7	75.5	68.5	57.9	47.4	35.1	22.8	*17.6*	8.8
95°	66.7	66.7	64.9	61.4	54.4	47.4	36.9	28.1	17.6	*14.0*	7.0
97.5°	50.9	49.1	49.1	45.6	42.1	35.1	28.1	21.1	14.0	*10.5*	5.3
100°	36.9	36.9	35.1	33.3	29.8	26.3	21.1	15.8	8.8	*7.0*	3.5
102.5°	26.3	24.6	24.6	24.6	21.1	17.6	14.0	10.5	7.0	*5.3*	1.8
105°	17.6	15.8	15.8	15.8	14.0	12.3	8.8	7.0	3.5	*3.5*	1.8
107.5°	10.5	10.5	10.5	10.5	8.8	7.0	5.3	3.5	1.8	*1.8*	1.8
110°	5.3	5.3	5.3	7.0	5.3	5.3	3.5	1.8	1.8	*1.8*	1.8

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
112.5°	3.5	3.5	3.5	3.5	3.5	3.5	1.8	1.8	1.8	*1.8*	1.8
115°	1.8	1.8	1.8	3.5	3.5	1.8	1.8	0.0	0.0	*1.8*	1.8
117.5°	0.0	0.0	1.8	1.8	1.8	1.8	0.0	0.0	0.0	*0.0*	1.8
120°	0.0	0.0	1.8	1.8	1.8	1.8	0.0	0.0	0.0	*0.0*	1.8
122.5°	0.0	0.0	1.8	1.8	1.8	1.8	0.0	0.0	0.0	*0.0*	1.8
125°	0.0	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	*0.0*	1.8
127.5°	0.0	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	*0.0*	1.8
130°	0.0	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	*0.0*	1.8
132.5°	0.0	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	*0.0*	1.8
135°	0.0	0.0	0.0	1.8	1.8	0.0	0.0	0.0	0.0	*0.0*	0.0
137.5°	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	*0.0*	0.0
140°	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	*0.0*	0.0
142.5°	0.0	0.0	0.0	0.0	1.8	1.8	0.0	0.0	0.0	*0.0*	0.0
145°	0.0	0.0	0.0	1.8	1.8	1.8	1.8	0.0	0.0	*0.0*	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	*0.0*	0.0
150°	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	*0.0*	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
157.5°	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	*0.0*	0.0
160°	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	*0.0*	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0
177.5°	0.0	0.0	0.0	1.8	0.0	1.8	0.0	0.0	0.0	*0.0*	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3
2.5°	193.1	193.1	193.1	191.3	191.3	191.3	189.6	189.6	187.8	187.8	187.8
5°	200.1	200.1	198.3	198.3	196.6	194.8	194.8	193.1	193.1	191.3	191.3
7.5°	212.4	212.4	210.6	208.9	205.4	203.6	201.9	200.1	200.1	198.3	198.3
10°	228.2	228.2	224.7	221.2	217.6	214.1	212.4	208.9	207.1	207.1	207.1
12.5°	247.5	245.7	242.2	237.0	233.4	228.2	224.7	221.2	217.6	217.6	217.6
15°	270.3	270.3	263.3	258.0	251.0	244.0	238.7	233.4	229.9	228.2	228.2
17.5°	298.4	298.4	289.6	280.8	272.1	263.3	256.3	249.2	245.7	244.0	244.0
20°	330.0	330.0	321.2	310.7	298.4	286.1	275.6	266.8	261.5	259.8	259.8
22.5°	368.6	368.6	356.3	342.3	326.5	308.9	294.9	284.3	279.1	275.6	275.6
25°	412.5	409.0	396.7	379.1	356.3	335.2	315.9	305.4	298.4	293.1	294.9
27.5°	472.2	466.9	451.1	421.3	393.2	365.1	342.3	328.2	319.5	315.9	317.7
30°	540.6	535.3	512.5	479.2	437.1	400.2	372.1	356.3	347.5	342.3	344.0
32.5°	623.1	616.1	588.0	542.4	493.2	440.6	405.5	386.2	377.4	372.1	370.4
35°	731.9	723.2	688.1	624.9	556.4	493.2	444.1	419.5	410.7	405.5	407.2
37.5°	854.8	842.5	795.1	717.9	631.9	551.1	495.0	463.4	452.9	444.1	444.1
40°	995.2	981.2	919.7	817.9	714.4	614.3	542.4	507.3	495.0	495.0	495.0
42.5°	1170.7	1156.7	1086.5	937.3	800.4	682.8	596.8	556.4	544.1	547.6	547.6
45°	1442.8	1423.5	1311.2	1114.6	912.7	753.0	652.9	607.3	598.5	607.3	607.3
47.5°	1692.0	1667.5	1502.5	1279.6	1023.3	823.2	709.1	656.5	652.9	672.3	672.3
50°	1971.1	1939.5	1765.8	1413.0	1112.8	900.4	760.0	696.8	698.6	726.7	735.4
52.5°	2511.7	2478.4	2178.2	1655.2	1209.4	928.5	781.1	705.6	705.6	737.2	749.5
55°	2832.9	2764.5	2373.1	1813.2	1249.7	961.9	772.3	670.5	667.0	702.1	712.6
57.5°	2938.3	2868.1	2413.4	1767.5	1223.4	919.7	721.4	575.7	568.7	614.3	610.8
60°	3024.3	2931.2	2348.5	1614.8	1074.2	830.2	623.1	428.3	398.4	438.8	437.1
62.5°	3266.5	3166.4	2352.0	1435.8	898.7	693.3	468.6	240.5	179.0	210.6	196.6
65°	*3387.6*	*3289.3*	*2388.9*	*1351.5*	*809.2*	*574.0*	*335.2*	*98.3*	*7.0*	*7.0*	*3.5*
67.5°	3284.0	3196.3	2341.5	1330.5	796.9	570.5	340.5	96.5	0.0	0.0	0.0
70°	3133.1	3048.8	2232.7	1256.7	756.5	549.4	333.5	96.5	0.0	0.0	0.0
72.5°	2868.1	2782.0	2044.8	1151.4	695.1	503.8	308.9	91.3	0.0	0.0	0.0
75°	2518.8	2453.8	1806.1	1014.5	612.6	444.1	273.8	80.7	0.0	0.0	0.0
77.5°	2132.6	2055.4	1514.8	844.3	512.5	368.6	231.7	66.7	0.0	0.0	0.0
80°	1711.4	1655.2	1193.6	661.7	396.7	287.9	180.8	50.9	0.0	0.0	0.0
82.5°	1272.5	1225.2	882.9	473.9	282.6	200.1	124.6	33.3	0.0	0.0	0.0
85°	835.5	823.2	566.9	287.9	168.5	110.6	66.7	15.8	0.0	0.0	0.0
87.5°	301.9	312.4	207.1	82.5	45.6	19.3	8.8	1.8	0.0	0.0	0.0
90°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
92.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
95°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
97.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
100°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
102.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
105°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
107.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
110°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P436914
CATALOG NUMBER: TT-D6-830-U-RW-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
115°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
117.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
120°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
122.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
125°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
127.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
130°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
132.5°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
135°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.8	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
150°	0.0	1.8	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	1.8	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Streetworks

Report Number: SP1-2407-176-7

Test Date: 09/27/2024

Luminaire Tested: MEM2-HTN-VA-30-830-U-WQ

Data in this report applies to families of products including MEM2-HTN-VA-30-830-U-WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

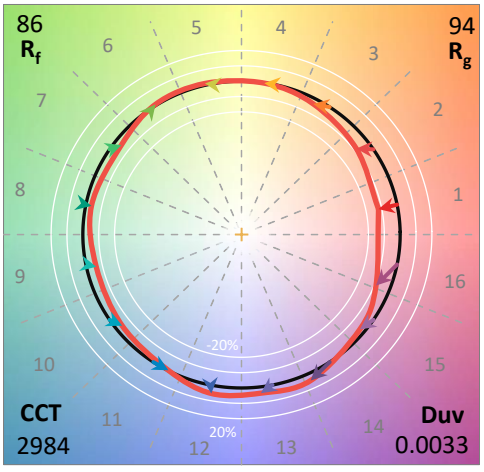
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2407-176-7
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	09/27/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Streetworks
Catalog Number:	**MEM2-HTN-VA-30-830-U-WQ**
Description:	EPIC MODERN VISUAL COMFORT 30W WAVESTREAM WIDE

Spectral Parameters

CCT (K):	2984	CRI (Ra):	81.8		
CIE u':	0.2500	R1:	79.4	R9:	-1.1
CIE v':	0.5264	R2:	89.9	R10:	78.4
Duv:	0.0033	R3:	96.6	R11:	80.8
CIE x:	0.4431	R4:	80.6	R12:	72.8
CIE y:	0.4147	R5:	80.1	R13:	81.7
CIE z:	0.1422	R6:	88.9	R14:	98.5
Peak Wavelength (nm):	601	R7:	82.6	R15:	70.2
Dominant Wavelength (nm):	581	R8:	56.0		
Purity:	57.4798				

Rf:	85.8
Rg:	94.1



Test Conditions

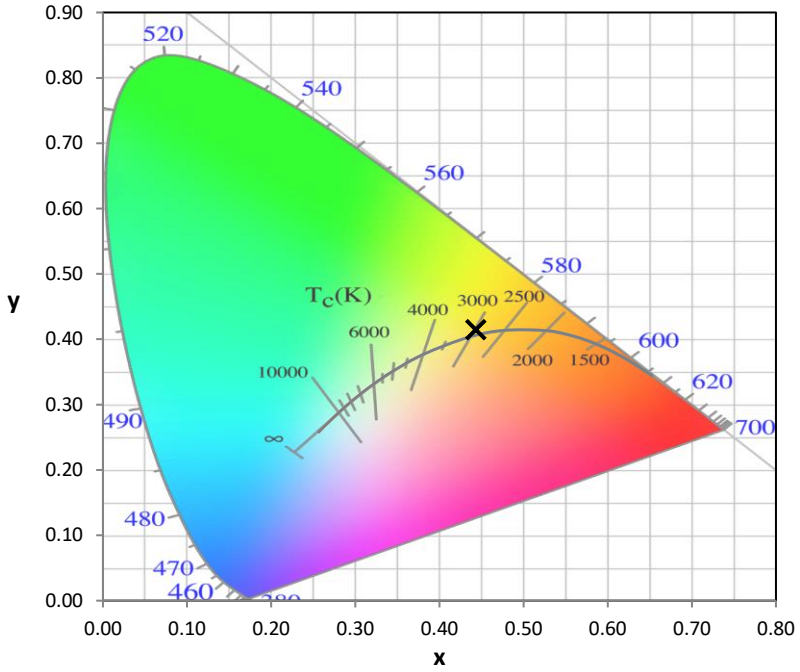
Stabilization Time:	29M
Operation Time:	1H 29M
Sphere Temperature (°C):	25.2

REPORT NUMBER: SP1-2407-176-7

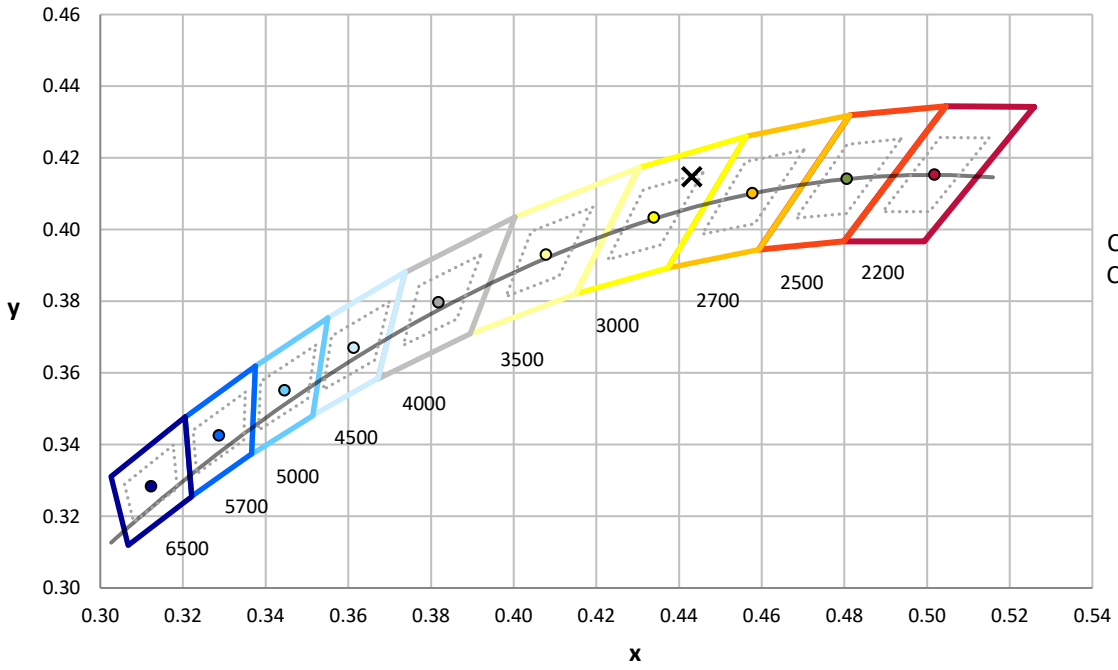
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2407-176-7

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

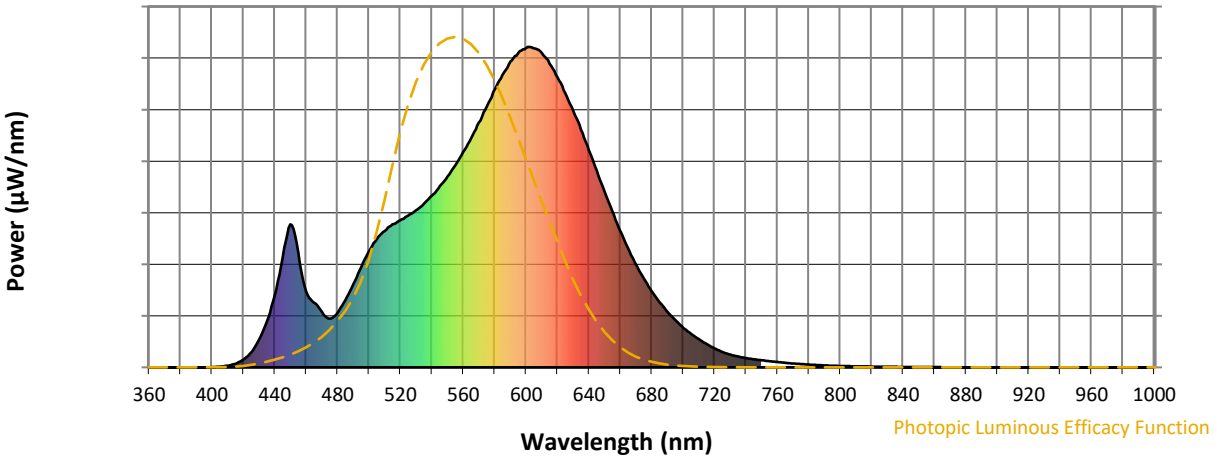


CCT = 2984K
CIE x = 0.4431
CIE y = 0.4147
Duv = 0.0033

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-176-7

Photopic Flux vs. Wavelength

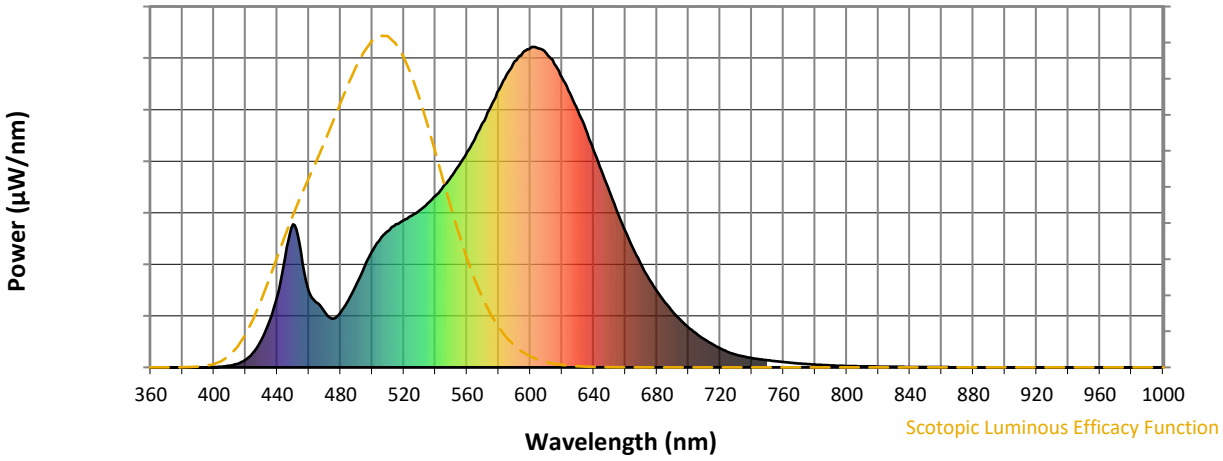


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	260	NR	620	905	NR	750	22	NR	880	0	NR
365	0	NR	495	312	NR	625	856	NR	755	19	NR	885	0	NR
370	0	NR	500	362	NR	630	801	NR	760	17	NR	890	0	NR
375	0	NR	505	399	NR	635	742	NR	765	14	NR	895	0	NR
380	0	NR	510	425	NR	640	677	NR	770	12	NR	900	0	NR
385	0	NR	515	446	NR	645	613	NR	775	10	NR	905	0	NR
390	0	NR	520	459	NR	650	549	NR	780	9	NR	910	0	NR
395	0	NR	525	473	NR	655	485	NR	785	7	NR	915	0	NR
400	1	NR	530	490	NR	660	425	NR	790	6	NR	920	0	NR
405	2	NR	535	511	NR	665	371	NR	795	5	NR	925	0	NR
410	5	NR	540	535	NR	670	321	NR	800	4	NR	930	0	NR
415	11	NR	545	565	NR	675	276	NR	805	4	NR	935	0	NR
420	24	NR	550	595	NR	680	238	NR	810	3	NR	940	0	NR
425	47	NR	555	631	NR	685	203	NR	815	3	NR	945	0	NR
430	86	NR	560	672	NR	690	174	NR	820	2	NR	950	0	NR
435	144	NR	565	715	NR	695	148	NR	825	2	NR	955	0	NR
440	224	NR	570	763	NR	700	124	NR	830	2	NR	960	0	NR
445	342	NR	575	814	NR	705	105	NR	835	2	NR	965	0	NR
450	446	NR	580	866	NR	710	88	NR	840	1	NR	970	0	NR
455	357	NR	585	912	NR	715	73	NR	845	1	NR	975	0	NR
460	237	NR	590	954	NR	720	59	NR	850	1	NR	980	0	NR
465	202	NR	595	981	NR	725	48	NR	855	1	NR	985	0	NR
470	172	NR	600	996	NR	730	40	NR	860	1	NR	990	0	NR
475	152	NR	605	996	NR	735	34	NR	865	1	NR	995	0	NR
480	171	NR	610	980	NR	740	29	NR	870	0	NR	1000	0	NR
485	210	NR	615	947	NR	745	25	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-7

Scotopic Flux vs. Wavelength

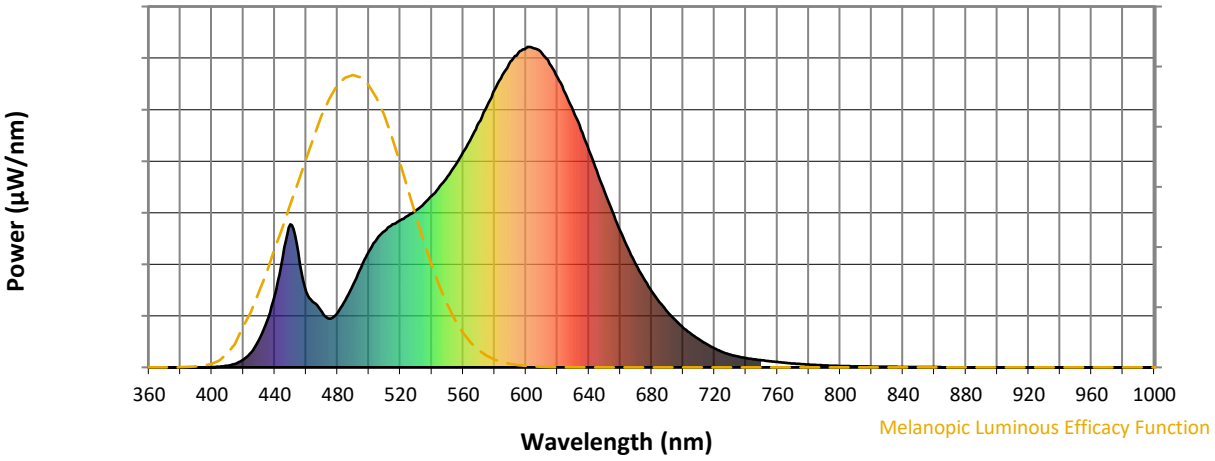


Scotopic Lumens: NR **S/P: 1.32**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	260	NR	620	905	NR	750	22	NR	880	0	NR
365	0	NR	495	312	NR	625	856	NR	755	19	NR	885	0	NR
370	0	NR	500	362	NR	630	801	NR	760	17	NR	890	0	NR
375	0	NR	505	399	NR	635	742	NR	765	14	NR	895	0	NR
380	0	NR	510	425	NR	640	677	NR	770	12	NR	900	0	NR
385	0	NR	515	446	NR	645	613	NR	775	10	NR	905	0	NR
390	0	NR	520	459	NR	650	549	NR	780	9	NR	910	0	NR
395	0	NR	525	473	NR	655	485	NR	785	7	NR	915	0	NR
400	1	NR	530	490	NR	660	425	NR	790	6	NR	920	0	NR
405	2	NR	535	511	NR	665	371	NR	795	5	NR	925	0	NR
410	5	NR	540	535	NR	670	321	NR	800	4	NR	930	0	NR
415	11	NR	545	565	NR	675	276	NR	805	4	NR	935	0	NR
420	24	NR	550	595	NR	680	238	NR	810	3	NR	940	0	NR
425	47	NR	555	631	NR	685	203	NR	815	3	NR	945	0	NR
430	86	NR	560	672	NR	690	174	NR	820	2	NR	950	0	NR
435	144	NR	565	715	NR	695	148	NR	825	2	NR	955	0	NR
440	224	NR	570	763	NR	700	124	NR	830	2	NR	960	0	NR
445	342	NR	575	814	NR	705	105	NR	835	2	NR	965	0	NR
450	446	NR	580	866	NR	710	88	NR	840	1	NR	970	0	NR
455	357	NR	585	912	NR	715	73	NR	845	1	NR	975	0	NR
460	237	NR	590	954	NR	720	59	NR	850	1	NR	980	0	NR
465	202	NR	595	981	NR	725	48	NR	855	1	NR	985	0	NR
470	172	NR	600	996	NR	730	40	NR	860	1	NR	990	0	NR
475	152	NR	605	996	NR	735	34	NR	865	1	NR	995	0	NR
480	171	NR	610	980	NR	740	29	NR	870	0	NR	1000	0	NR
485	210	NR	615	947	NR	745	25	NR	875	0	NR			

REPORT NUMBER: SP1-2407-176-7

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.51**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	260	NR	620	905	NR	750	22	NR	880	0	NR
365	0	NR	495	312	NR	625	856	NR	755	19	NR	885	0	NR
370	0	NR	500	362	NR	630	801	NR	760	17	NR	890	0	NR
375	0	NR	505	399	NR	635	742	NR	765	14	NR	895	0	NR
380	0	NR	510	425	NR	640	677	NR	770	12	NR	900	0	NR
385	0	NR	515	446	NR	645	613	NR	775	10	NR	905	0	NR
390	0	NR	520	459	NR	650	549	NR	780	9	NR	910	0	NR
395	0	NR	525	473	NR	655	485	NR	785	7	NR	915	0	NR
400	1	NR	530	490	NR	660	425	NR	790	6	NR	920	0	NR
405	2	NR	535	511	NR	665	371	NR	795	5	NR	925	0	NR
410	5	NR	540	535	NR	670	321	NR	800	4	NR	930	0	NR
415	11	NR	545	565	NR	675	276	NR	805	4	NR	935	0	NR
420	24	NR	550	595	NR	680	238	NR	810	3	NR	940	0	NR
425	47	NR	555	631	NR	685	203	NR	815	3	NR	945	0	NR
430	86	NR	560	672	NR	690	174	NR	820	2	NR	950	0	NR
435	144	NR	565	715	NR	695	148	NR	825	2	NR	955	0	NR
440	224	NR	570	763	NR	700	124	NR	830	2	NR	960	0	NR
445	342	NR	575	814	NR	705	105	NR	835	2	NR	965	0	NR
450	446	NR	580	866	NR	710	88	NR	840	1	NR	970	0	NR
455	357	NR	585	912	NR	715	73	NR	845	1	NR	975	0	NR
460	237	NR	590	954	NR	720	59	NR	850	1	NR	980	0	NR
465	202	NR	595	981	NR	725	48	NR	855	1	NR	985	0	NR
470	172	NR	600	996	NR	730	40	NR	860	1	NR	990	0	NR
475	152	NR	605	996	NR	735	34	NR	865	1	NR	995	0	NR
480	171	NR	610	980	NR	740	29	NR	870	0	NR	1000	0	NR
485	210	NR	615	947	NR	745	25	NR	875	0	NR			

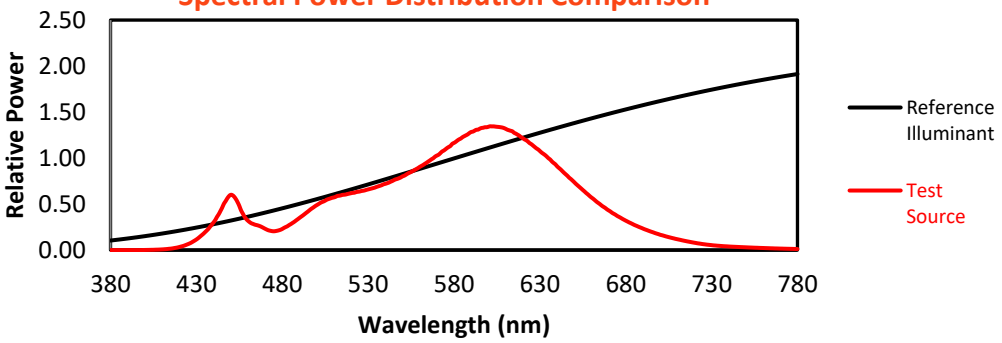
REPORT NUMBER: SP1-2407-176-7

TM-30-18

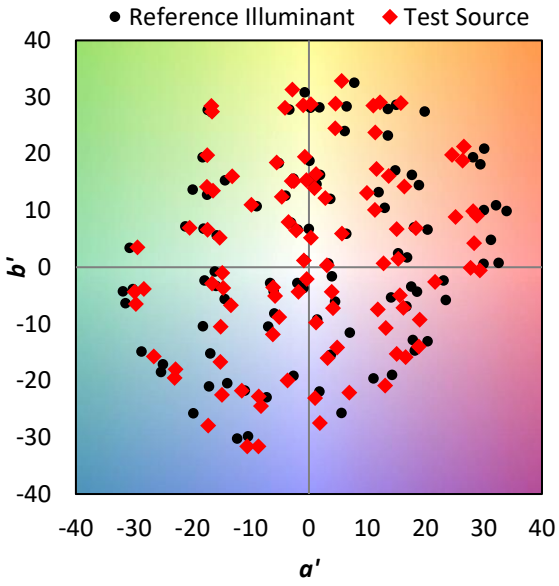
Summary

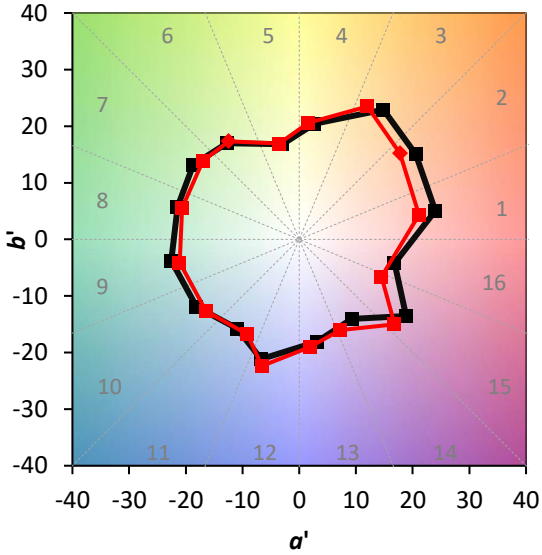
R_f = 85.8
R_g = 94.1
CIE R_a = 81.8
R_9 = -1.1

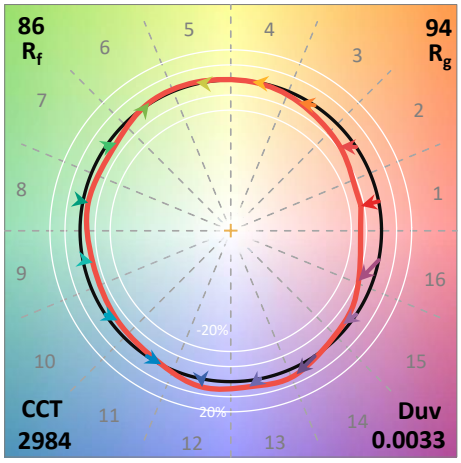
Spectral Power Distribution Comparison

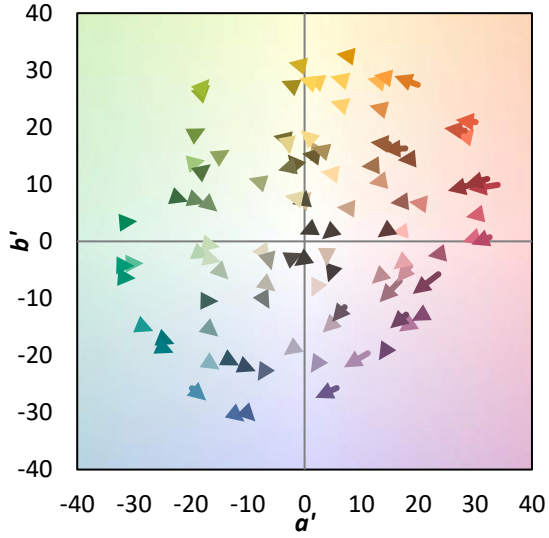


Color Vector Graphics







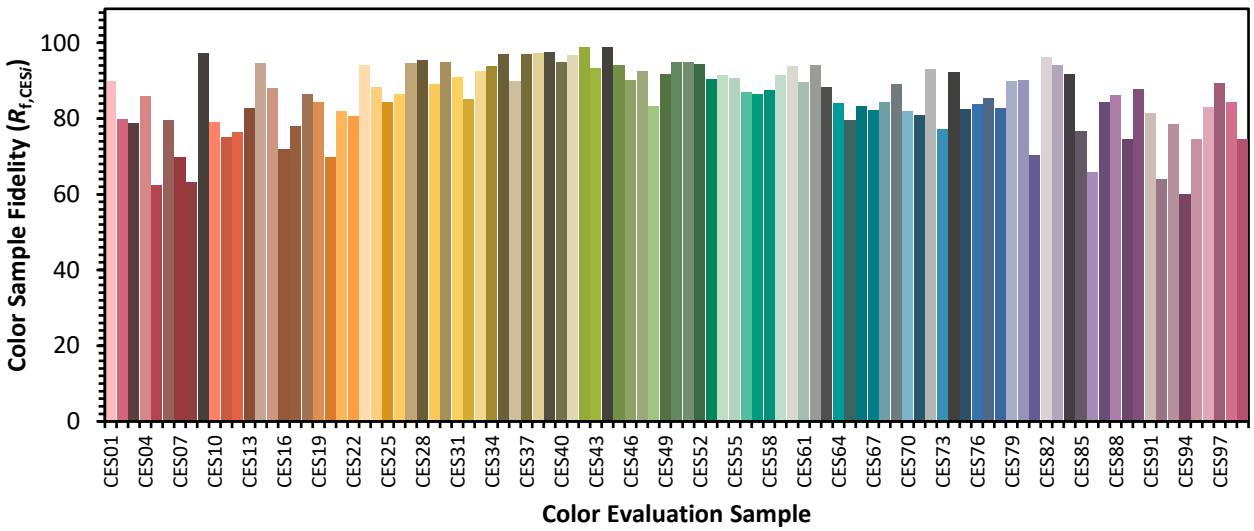


REPORT NUMBER: SP1-2407-176-7

TM-30-18

Individual Sample Fidelity Index ($R_{f,i}$)

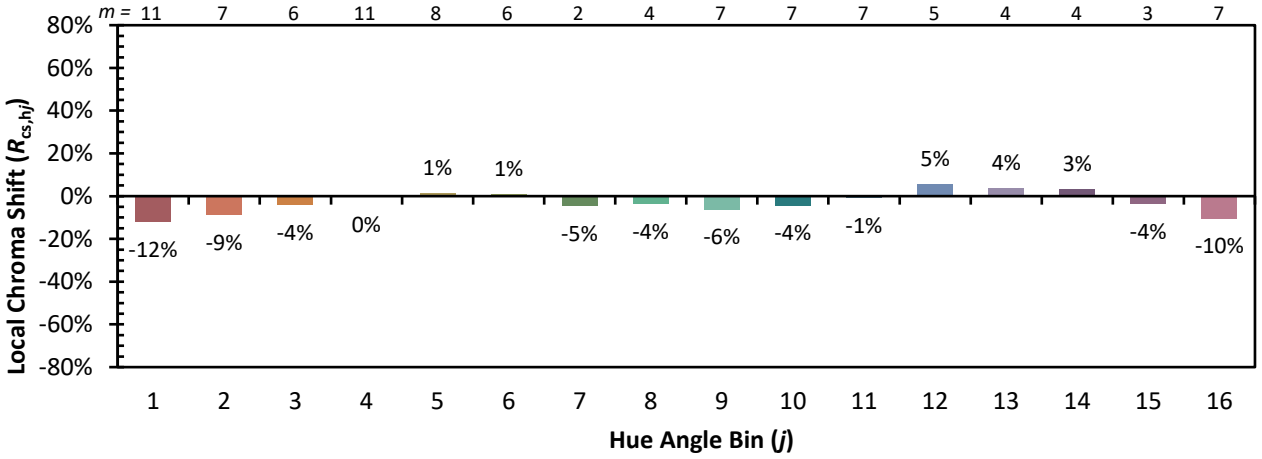
CES01 = 86	CES26 = 86	CES51 = 95	CES76 = 84
CES02 = 63	CES27 = 95	CES52 = 94	CES77 = 86
CES03 = 31	CES28 = 95	CES53 = 90	CES78 = 83
CES04 = 70	CES29 = 89	CES54 = 91	CES79 = 90
CES05 = 50	CES30 = 95	CES55 = 91	CES80 = 90
CES06 = 51	CES31 = 91	CES56 = 87	CES81 = 70
CES07 = 42	CES32 = 85	CES57 = 86	CES82 = 96
CES08 = 41	CES33 = 93	CES58 = 87	CES83 = 94
CES09 = 29	CES34 = 94	CES59 = 92	CES84 = 92
CES10 = 76	CES35 = 97	CES60 = 94	CES85 = 77
CES11 = 59	CES36 = 90	CES61 = 90	CES86 = 66
CES12 = 65	CES37 = 97	CES62 = 94	CES87 = 84
CES13 = 43	CES38 = 97	CES63 = 88	CES88 = 86
CES14 = 74	CES39 = 98	CES64 = 84	CES89 = 75
CES15 = 72	CES40 = 95	CES65 = 80	CES90 = 88
CES16 = 47	CES41 = 97	CES66 = 83	CES91 = 81
CES17 = 50	CES42 = 99	CES67 = 82	CES92 = 64
CES18 = 56	CES43 = 93	CES68 = 84	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 89	CES94 = 60
CES20 = 67	CES45 = 94	CES70 = 82	CES95 = 74
CES21 = 87	CES46 = 90	CES71 = 81	CES96 = 83
CES22 = 79	CES47 = 93	CES72 = 93	CES97 = 89
CES23 = 92	CES48 = 83	CES73 = 77	CES98 = 84
CES24 = 91	CES49 = 92	CES74 = 92	CES99 = 75
CES25 = 72	CES50 = 95	CES75 = 83	

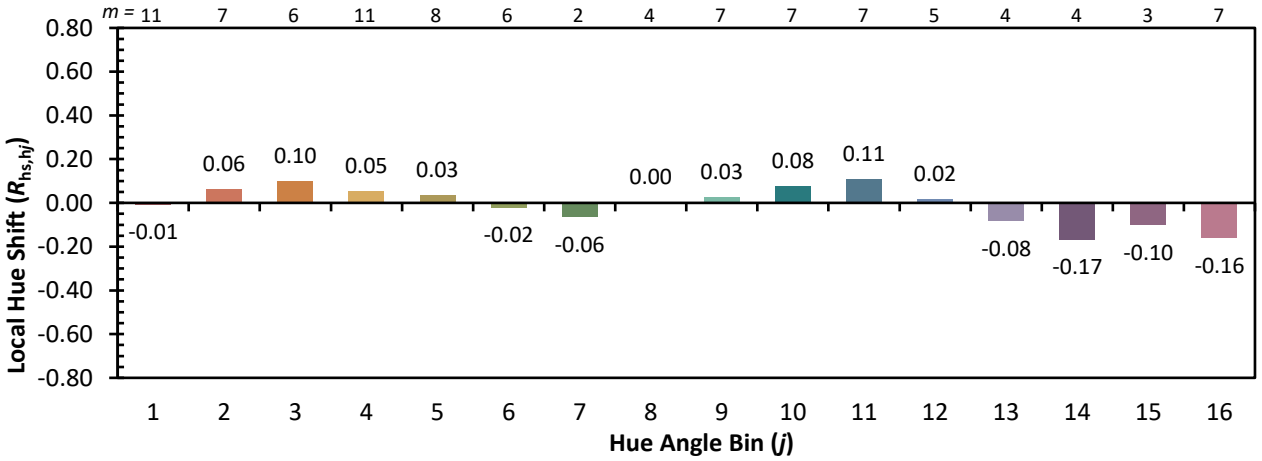


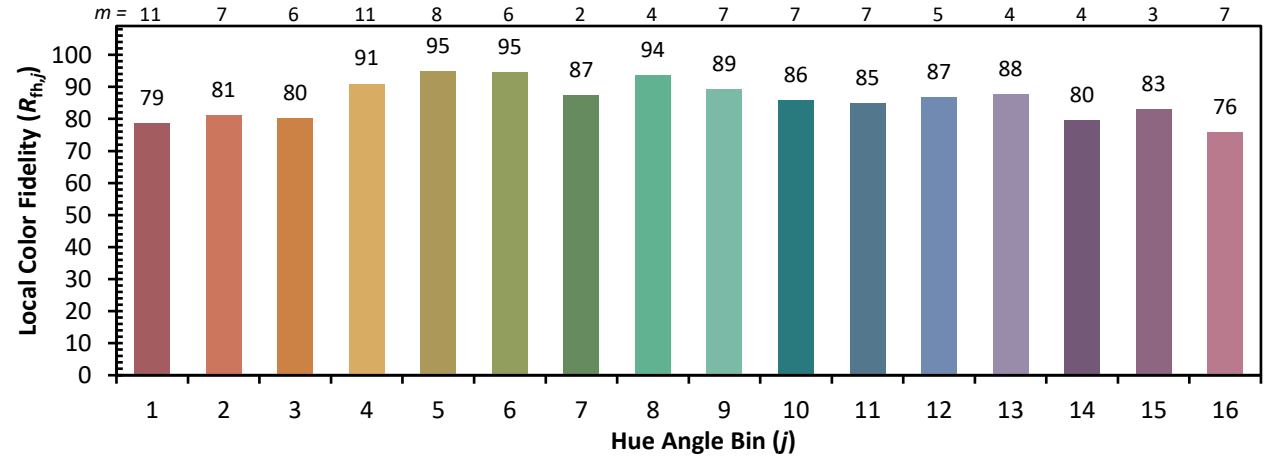
REPORT NUMBER: SP1-2407-176-7

TM-30-18

Color Rendition by Hue-Angle Bin



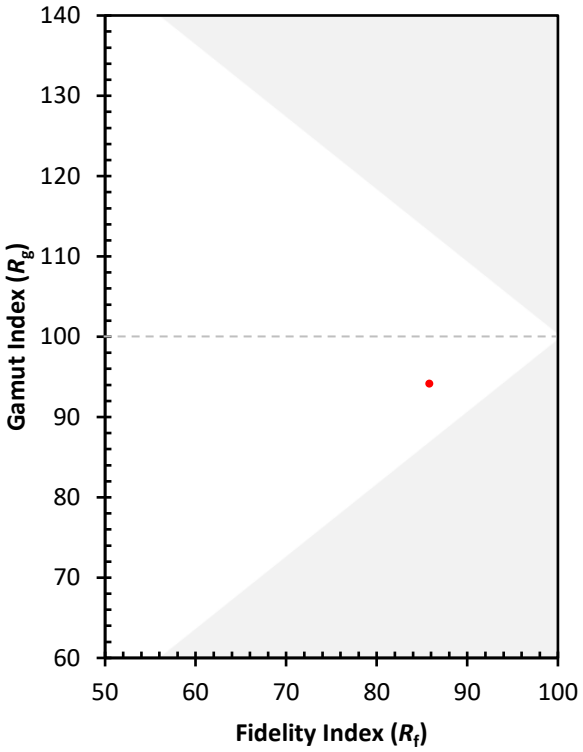


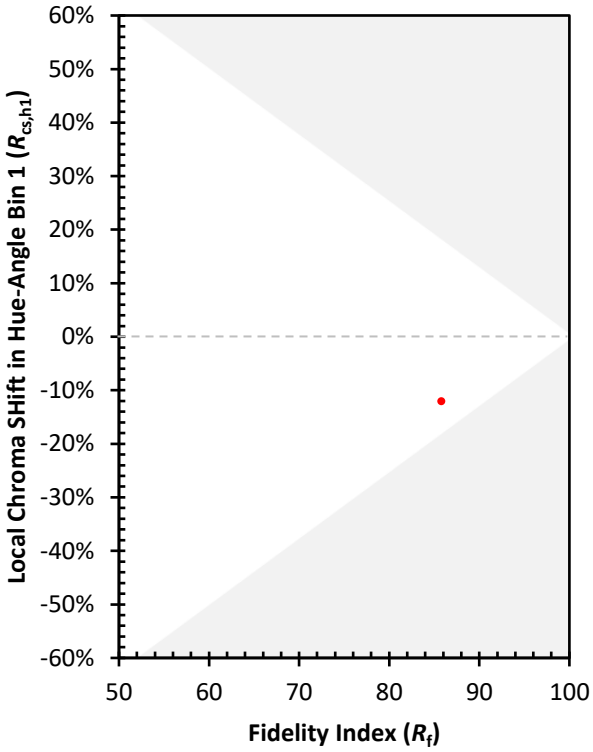


REPORT NUMBER: SP1-2407-176-7

TM-30-18

Measure Comparisons





(END OF REPORT)